"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

OVSEPYAN, A.P.; MOROZOV, N.S.; GAYLIS, A.K.

Composite reinforced concrete foundation under the GT-700-5 gas turbine. Stroi.truboprov. 10 no.10:29-31 O '65. (MIRA 18:10)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIS, G.

[redacted]

Dairy schools. Moloch. prom. 18 no.6:38-39 '57. (MLRA 10:6)

1. Valmiyerskaya shkola masterov maslodeliya.
(Dairy schools)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIS, M. L., Eng., GLAZOV, A. P., eng., ROZENKNOP, M. P., Eng.

Z

Adjusting a two-stage recloser. Elek. sta., 23, No 6, 1952.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

KALNBERZIN, Ya.[Kalnberzins, J.]; GAYLIS, K.[Gailis, K.]

Decree of the Presidium of the Supreme Soviet of the Latvian S.S.R. concerning the awarding of the Honorary Diploma of the Presidium of the Supreme Soviet of the Latvian S.S.R. Vestis Latv ak no.10:121 '61.

1. Predsedatel' Prezidiuma Verkhovnogo Soveta Latviyskoy SSR (for Kalnberzin) 2. Sekretar' Prezidiuma Verkhovnogo Soveta Latviyskoy SSR (for Gaylis).

(Latvia—Rewards)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIS, V.

KIRKHENSHTEYN, A., akademik, Geroy Sotsialisticheskogo Truda; KAL'NIN'SH, A. [Kalniņš A.], akademik; STRADIN'SH, P. [Stradiņš, P.], akademik; SUDRABKALN, Yan [Sudrabkalns, Jānis], narodnyy poet Latviyskoy SSR MELBARDIS, K., khudozhnik; LAPIN'SH, A. [Lapiņš, A.], narodnyy khudozhnik Latviyskoy SSR; YUROVSKIY, Yu., narodnyy artist SSSR; AVOTS, A., fotolyubitel'; VARDAUNIS, E., khudozhnik, zasluzhennyy deyatel' iskusstv Latviyskoy SSR; GAYLIS, V., kinooperator; RIDZENIYEKS, V., fotograf; KALNYN'SH, E. [Kalnins, E.]; LOGANSON, R. [Iohanson, R.], stareyshiy master khudozhestvennoy fotografii; RIEKSTS, Ya. [Rieksts, J.], fotograf; LERKH, Yu.; FEDOSEYEV, B., fotograf; REYKHMAN, E., zasluzhennyy deyatel' kul'tury Latviyskoy SSR; GROBMAN, Ya. [Grobman, J.], fotograf; OZOLS, Ya. [Ozols, J.], fotograf; TIKNUS, B., fotograf; FADEYEV, Ye., fotograf; RAKE, I., fotograf; BERZTIS, A., fotograf; RAKE, K., fotograf; UPIT, V., fotograf; SHADKHAN, M., fotolyubitel'; RITERS, G., fotolyubitel'.

Organize a society of Soviet photographers! Sov.foto 18 no.4:77 Ap '58. (MIRA 11:6)

1.Rizhskaya kinostudiya (for Gaylis, Fedoseyev).3.AN Latviyskoy SSR (for Ridzenieks). 4.Chlen-korrespondent Akademii khudozhestv SSSR (for Kal'nynsh, E). 5.Zhurnal "Rigas foto" (for Rieksts, Gorman, Ozols). 6.Latviyskoye teatral'noye obshchestvo (for Lerkh). 7.Direktor Doma narodnogo tvorchestva imeni E. Melngaylisa (for Reykhman). 8.Predsedatel' Tvorcheskogo soveta (for Grobman). 9.Chlen Tvorcheskogo soveta (for Ozols). 10.Gazeta "TSinya" (for Tiknus). 11.Fotokhronika Latviyskogo telegrafnogo agentstva (for Fadeyev). 12.Institut Latgiproprom (for Rake, I.).

(Photography--Societies)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIS, V. [Gailis, V.] (Riga)

In the photography sections of the Press Association. Sov.foto 23 no.1:18 Ja '63. (MIRA 16:5)
(Latvia--Journalism--Societies, etc.)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIS, V.V.; YEFIMOV, L.F.

Mechanism for preventing short-circuiting of electric motors with phase-wound rotors when they are started with the rheostat in "Run" position. Azerb. neft. khoz. 39 no.10:45-46 O '60. (MIRA 13:11)
(Electric motors, Alternating current)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIS, Ya. Ya. In Latvian

GAYLIS, Ya. Ya. -- "Typoligical Characteristics of the Grinis Area and Methods of Its Afforestation." Academy Sci Latvian SSR, Inst. of Forestry Problems, 1955. In Latvian (Dissertation for the Degree of Candidate of Agricultural Sciences)

SO: Izvestiya Ak. Nauk Latviyskoy SSR, No. 9, Sept., 1955

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIS, YA. YA

USSR / Forestry. Forest Crops K-4

Abs Jour: Ref Zhur-Biol., No 13, 1958, 58415

Author : Gaylis, Ya, Ya.

Inst : Institute of Forest-Economical Problems, AS LatvSSR

Title : Typological Description of "Grinis" and Methods of its Afforestation

Orig Pub: In-ta lesokhoz. problem, AN LatvSSR, 1956, 11, 81-111

Abstract: Grinis (G) is a group of peculiar types of forest-growing conditions in the Latvian SSR. Two types of G are distinguished: sphagnum -(peat moss) heath and sedge-moorgrass. In both types the natural reforestation of the forest proceeds unsatisfactorily. A successful artificial affo-

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The possibilities and methods of afforestation of G under Baltic area conditions are indicated.
--G. A. Tarasov

Card 2/2

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIS, Ya.Ya.

Grinis, a peculiar type of vegetation in the Latvian S.S.R. Bot. zhur. 42 no.2:280-291 F '57. (MLRA 10:3)

1. Institut lesokhozyaystvennykh problem Akademii nauk Latviyskoy SSR. (Latvia--Moors and heaths)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIS, Ye. Ya.

See: BIRYUKOVA-GAYLIS, Ye. Ya.

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

NECHAYEV, Ye.V., kand. tekhn. nauk; GAYLISH, Ya.V., inzh.; VINOKUROV, M.Kh.

Testing of the SU-15-39 boiler with a Shershnev furnace system operating on milled peat. Prom. energ. 19 no.5:27-30 My '64. (MIRA 17:6)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIT, A.A.

GAYLIT, A.A.

Urgent problems in the production of secondary aluminum. TSvet. met. 27 no.1:59-61 Ja-F '54. (MLRA 10:9)
(Aluminum)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

Gaylit, A.A.

ALEKSEYEV, N.S.; BELYAYEV, A.P.; BUGAREV, L.A.; BUTOMO, D.G.; VASIL'YEV, Z.V.; VERIGIN, V.N.; VOROB'YEV, G.M.; GAYLIT, A.A.; GOL'SHTEYN, P.M.; GOKHSHTEYN, M.B.; ZHOLOBOV, V.V.; ZEDIN, N.N.; IVANOV-SKOBLIKOV, N.I.; KUTEPOV, Ya.V.; LANDIKHOV, A.D.; MARAYEV, S.Ye.; MILLER, L.Ye.; OL'KHOV, N.P.; PERLIN, I.L.; POSTNIKOV, N.N.; ROZOV, M.N.; CHERNYAK, S.N.; CHUPRAKOV, V.Ya.; TSENTER, Ya.A.

Vladimir Oskarovich Gagen-Torn; obituary. TSvet.met. 27 no.5:67-68 S-O '54. (MIRA 10:10)

(Gagen-Torn, Vladimir Oskarovich, 1888-1954)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIT, A. A.

SOV/136-59-2-21/24

AUTHOR: Istrin, M.

TITLE: Conference on Secondary Non-Ferrous Metals (Soveshchaniye po vtorichnym tsvetnym metallam)

PERIODICAL: Tsvetnyye Metally, 1959, Nr 2, pp 85-87 (USSR)

ABSTRACT: The third conference of the non-ferrous metals economy section of the Permanent Committee on Economic and Scientific and Technical Co-operation in the field of Non-ferrous Metallurgy of the participating nations of the Sovet Ekonomicheskoy Vzaimopomoshchi (Council for Mutual Economic Aid) was held in Moscow on 9th-20th December 1958. The conference heard and discussed the following reports from representations of the various nations: "Organisation of the Preparation and First Treatment of Non-Ferrous Metal Scrap and Waste" (S.M.Eydis reported for the USSR); "Production of Secondary Aluminium-Base Alloys" (Engineer A.A.Gaylit for the USSR); "Production of Secondary Copper-Base Alloys" (V.M.Bazilevskiy, Candidate of Technical Sciences for the USSR); P.S.Shesternin, Candidate of Technical Sciences on "Results of Trials of an Electric Shaft Furnace for

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SOV/136-59-2-21/24

Conference on Secondary Non-Ferrous Metals

Reclaiming Melting of Lead Scrap and Waste". The consumption of secondary non-ferrous metals in some of the centres represented is half the total consumption. The author tabulates for the various nations 1958 productions as percentages of those for 1953 and planned 1965 productions as percentages of those for 1958 for copper, lead and zinc. He notes that production possibilities are not everywhere being fully utilised. The conference made recommendations for improving the situation and urged especially better scrap collection, storage and preparation. The importance of dust catching to avoid zinc losses was stressed. The formation of a working group to study melting practice for secondary aluminium alloys was urged; for melting copper-base scrap the conference recommended the induction furnace. The next conference of the section was planned for February 1959 in Prague;

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SOV/136-59-2-21/24

Conference on Secondary Non-Ferrous Metals

an exhibition on non-ferrous metals economy was recommended for that town for June 1959. There is 1 table.

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85553

15.3000 also 2311

S/131/60/000/011/001/002
B021/B058

AUTHORS: Gaylit, A. A., Grafas, N. I., Tsyganov, A. S., Shagalova, B. Yu., Nekrasov, K. D., Sassa, V. S.

TITLE: Experimental Use of Heat-resistant Concrete 15

PERIODICAL: Ogneupory, 1960, No. 11, pp. 520-523

TEXT: The applicability of heat-resistant concrete for lining crucible induction furnaces was studied at the Moskovskiy zavod alyuminiyevykh splavov (Moscow Plant for Aluminum Alloys). The laboratory for heat-resistant concretes developed the concrete composition on the basis of investigations. The following materials were required for 1 $m^3$ of concrete: 800 kg coarse-grained and 500 kg fine-grained fire-clay filler, 550 kg fine-ground magnesite, 18 to 21 kg commercial sodium fluosilicate and 300 to 350 kg liquid glass with a density of from 1.36 to 1.38 $g/cm^3$. The molten glass corresponded to ГОСТ 962-41 (GOST 962-41), its modulus amounted to 2.4 to 3.0. The weight by volume of the heat-resistant concrete in dry state amounted to 2.2 $g/cm^3$, the fire shrinkage at temperatures up to 1400°C to 0.2%. The mean linear thermal-expansion coefficient amounted to

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85553

Experimental Use of Heat-resistant Concrete S/131/60/000/011/001/002
B021/B058

$6.7 \cdot 10^{-6}$ in the range of from 20 to 1000°C. The superior properties of heat-resistant concrete make it possible to build and dry a crucible induction furnace within seven days. The crucible with a wall thickness of 60 mm was made in a split mold by means of a vibration device (Fig. 1). The inductor lining was rammed at the Podol'skiy zavod tsvetnykh metallov (Podol'sk Plant for Nonferrous Metals). This work was conducted by a group of engineers under the supervision of the Nauchno-issledovatel'skiy institut betona i zhelezobetona (Scientific Research Institute of Concrete and Reinforced Concrete). The graphic representation of the drying and annealing of the crucible is shown in Fig. 2 and a dried crucible made of heat-resistant concrete in Fig. 3. The mechanical properties of the alloy АЛ10ч (AL10ch) molten in this furnace are higher than when molten in a radiation furnace. The crucibles made from heat-resistant concrete may be used for melting various nonferrous metals with a melting temperature of up to 1200°C. The results are: total drying and annealing time 140 hrs, aluminum alloys were molten for 2.5 months with up to 15 heats per day. The crucible withstood 700 heats. About 116 tons of metal were molten. After 700 heats, cracks up to 0.7 mm wide were found. Experiments for the manufacture and test of larger crucibles are intended. The

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Experimental Use of Heat-resistant Concrete S/131/60/000/011/001/002
B021/B058

applicability of heat-resistant concrete of various composition for crucible induction furnaces and other metallurgical aggregates is to be studied. There are 3 figures.

ASSOCIATION: Moskovskiy zavod alyuminiyevykh splavov (Moscow Plant for Aluminum Alloys) Gaylit, A. A., Grafas, N. I., Tsyganov, A. S., Shagalova, B. Yu.; Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR (Scientific Research Institute of Concrete and Reinforced Concrete of the Academy of Construction Engineering and Architecture USSR) Nekrasov, K. D., Sassa, V. S.

X

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

KRYSENKO, N.S.; POZNYAKOV, V.Ya.; GAZARYAN, L.M.; ZADOV, Ye.B.; KADYRZHANOV, K.K.; KUZ'MIN, A.V.; TROITSKIY, A.V.; LEZGINTSEV, G.M.; MITROFANOV, S.I.; SOLOV'YEV, V.Ya.; SOBOL', S.I.; MYAGKOVA, T.M.; GAYLIT, A.A.; GENIN, N.N.; GRATSERSHTEYN, I.M.; SKORNYAKOV, Yu.T., referent

Fourth plenum of the central administration of the Scientific Technological Society for Nonferrous Metallurgy. TSvet. met. 38 no.5:90 My '65. (MIRA 18:6)

1. Chlen TSentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva tsvetnoy metallurgii i zavod "Ukrtsink" (for Krysenko). 2. Chlen TSentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva tsvetnoy metallurgii i "Severonikel'" (for Poznyakov). 3. Institut metallurgii im. Baykova (for Gazaryan). 4. Predsedatel' soveta Nauchno-tekhnicheskogo obshchestva Kol'chuginskogo zavoda OTsM (for Zadov). 5. Chlen TSentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva tsvetnoy metallurgii, Sovet narodnogo khozyaystva Kazakhskoy SSR (for Kadyrzhanov). 6. Predsedatel' gorno-geologicheskoy sektsii TSentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva tsvetnoy metallurgii; Gosudarstvennyy komitet Soveta Ministrov RSFSR po koordinatsii nauchno-issledovatel'skikh rabot (for Kuz'min). 7. Chlen TSentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva

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KRYSENKO, N.S.--- (continued) Card 2.

tsvetnoy metallurgii, Sovet narodnogo khozyaystva SSSR (for Troitskiy). 8. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy tsvetnoy metallurgii (for Lezgintsev). 9. Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh metallov (for Mitrofanov, Sobol', Genin). 10. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov (for Sclov'yev). 11. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut mekhanicheskoy obrabotki poleznykh iskopayemykh (for Myagkova). 12. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy tsvetnoy metallurgii (for Gaylit).

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

S/182/61/000/012/002/004
D038/D112

AUTHOR: Gaylit, P.K.

TITLE: On the optimum carbon content in deep drawing steel

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 12, 1961, 6

TEXT: The present article refers to an earlier work by P.G. Kovtun and O.A. Rozhkov [Abstracter's note: This name is given twice as "Rozhkov" and once as "Ryzhkov"] published in the "Kuznechno-shtampovochnoye proizvodstvo", no.6, 1961, in which they state that deep drawing operations are more successful when the ladle samples of the steel contain 0.09-0.13% of C, a content which they consider optimal and which corresponds to 0.06-0.11% of C in the steel sheets. P.K. Gaylit amplifies this statement, asserting that only a C content also ensuring optimum smelting and sheet-rolling processes may be considered optimal. He considers that this C content does in fact satisfy these two criteria, as it reduces the amount of dissolved oxygen in the steel-smelting process and many years of practice at the Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine) in rolling

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0.8-1.2 mm thick sheets showed that 08кп (08kp) steel containing only 0.05-0.06% of C, rolls much worse than the same steel containing 0.10-0.11% of C and 10kp steel. Furthermore, steel containing 0.8 -0.14% of C can be cold rolled at the maximum permissible speeds at normal roller pressure, with only rare cases of breaks in the strips and scoring of the rolls. The author also mentions Kovtun's statement that when the C content in the ladle sample is 0.08-0.11%, 0.25-0.40 mm thick tin-plate sheets can also be cold-rolled more successfully. There are 3 Soviet-bloc references.



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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIT, T.A.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1360

AUTHOR GAJLIT, T.A., MINAKOVA, I.I.

TITLE The Synchronization of a Tube Generator for Sinus Oscillations by a Fractured Multiple Quasi-Elastic Force.

PERIODICAL Radiotechnika, 11, fasc. 7, 50-56 (1956)
Issued: 8 / 1956 reviewed: 10 / 1956

The frequency $\omega = p/n$ ($n = 2,3,\ldots k$) of the harmonic exterior force is near the frequency of one of the sub-harmonics of the eigenoscillations of the generator, but the eigenfrequency of the generator is $\omega_0 \sim p$. The present investigation considers the soft and the hard mode of operation of the generator. If the system produces quasisinusoidal eigenoscillations in the case of a lacking exterior emf, periodic synchronous-like modes of operation of the generator are possible if an exterior emf (with $p \sim \omega_0$) exists. On this occasion oscillations enforced in the generator are produced with a frequency of the exterior force, and its own eigen oscillations are synchronized, i.e. its frequency then amounts to $\omega = p$. The amplitudes of the synchronized eigenoscillations depend in a very complicated manner on the amplitude of the exterior force, but each term of the corresponding formulae can be interpreted physically. The character of the modification of the amplitude and the phase in the case of synchronous-like operation depends essentially on the coefficients to be found in the equations with $\cos\varphi$, $\sin\varphi$, $\cos 2\varphi$ and $\sin 2\varphi$. In the general case investigation is carried out graphically. It was proved in theory that phase- and amplitude-jumps are possible. These jumps may occur according to the direction of the modification of the "detuning"

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at various points of the synchronization domain. If there are jumps, phases may change by more than $\pi$ within the domain of synchronization. Furthermore, there exists a domain with stationary phase values. The theoretical investigation of a concrete generator scheme ($n = 2$ and $n = 3$) confirms the conclusions derived here. On the occasion of a thorough investigation of the case $n = 2$ the existence of a "threshold value" of a certain parameter was furthermore found, in the case of which further jumps are possible.

The block scheme of the experimental order is given; in the cathode repeater it contains a circuit which is tuned in to the frequency of the eigenoscillations of the generator to be synchronized. It is thereby possible, in the spectrum of the exterior force, to suppress the harmonics with a frequency that is near the eigenfrequency of the generator. Synchronization was carried out at frequencies of the exterior force $\omega_e = p/n$ ($n = 2,3,4,5$; $p \sim \omega_o$, $\omega_o$ - frequency of the generator, and showed that synchronization takes place on the subharmonic at arbitrarily small amplitudes of the exterior force. If the amplitude of the exterior force is increased, the breadth of the synchronization band increases non-linearly.

INSTITUTION:

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

Gaylit, T.A.

3(6), 3(7) SOV/20-123-5-13/50

AUTHORS: Gusev, V. D., Drachev, L. A., Mirkotan, S. F., Berezin, Yu. V., Kiyanovskiy, M. F., Vinogradova, M. B., Gaylit, T. A.

TITLE: The Structure and the Motions of Large-Scale Inhomogeneities in the Ionosphere Layer $F_2$ (Struktura i dvizheniya krupnykh neodnorodnostey v ionosfernom sloye $F_2$)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 5, pp 817-820 (USSR)

ABSTRACT: The authors invented an integral phase method for the recording of great inhomogeneities and their motions. This method is free from the deficiencies of other methods and consists of the recording of the variations of the phase way of the reflected signal. For small inhomogeneities, these variations are of the order 2s, and for large-scale inhomogeneities - of the order 40 - 200 s. This method has a high precision (which amounts to dozens of meters) and a high resolving power. This permits the use of statistical methods in the investigation of large-scale inhomogeneities. The apparatus for the recording of phase variations consists

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The Structure and the Motions of Large-Scale Inhomogeneities in the Ionosphere Layer $F_2$ SOV/20-123-5-13/50

of receiving and transmitting ionosphere stations with phase indicators and photoindicators. The phase variations are recorded on a cinematographic film. The authors used 3 recording apparatus placed in 3 points of the Earth's surface, these points formed a triangle of 30 - 40 km side length. In each of these points the variations of the phase of the reflected signal were recorded. In this way, the authors found a regular smooth curve for $\varphi_p(t)$ on which random-character variations $\varphi(t)$ (which are due to the presence of inhomogeneities and their motions in the ionosphere) are superimposed. The term $\varphi_p(t)$ is due to the variation of the height distribution of the ionization of the ionospheric layers from day to night. A suitable utilization of the results permits a separation of $\varphi_p$ and $\varphi$. (These 2 quantities are not exactly defined in this paper). An analysis of the behavior of $\varphi(t)$ gives data concerning the dimensions, the shape, and the motions of the inhomogeneities. The following parameters were found: The velocity $V_d$ of the horizontal drive in the ionosphere and

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Gaylit, T.A.

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SOV/20-123-5-13/50

The Structure and the Motions of Large-Scale Inhomogeneities in the Ionosphere Layer $F_2$

its direction which is determined by the angle $\beta$; the average shape of the ionosphere inhomogeneities which is determined by the "characteristic ellipse"; the radius of correlation and the spatial dimensions of the inhomogeneities $\Delta$ ; the time of spreading $\tau_e$ or the parameter of spreading $\delta$ of the inhomogeneities. By analysis of the variations of the phase and of the rate of phase variation the direction of the reflected radiowaves could be determined. The correlation functions were calculated by means of an electronic computer of the type "Strela". All the above-discussed results concern the layer $F_2$; they were found from May 1957 to October 1957. The large-scale inhomogeneities have a distinctly anisotropic shape; the dimensions depend on the direction . Numerical values are given for the dimensions of the inhomogeneities. The values of $V_d$ are within the interval 0 - 40 km/min, and most frequently the values 8 - 10 km/min are found. The values of $V_d$ increase only slightly from night to day. Because of

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SOV/20-123-5-13/50

The Structure and the Motions of Large-Scale Inhomogeneities in the Ionosphere Layer $F_2$

the presence of inhomogeneities in the ionosphere, the normal to the front of the reflected wave deviates from the vertical direction. For $\delta$ and $\tau_e$ the average values $\delta \sim 0.5$ (day) and $\delta \sim 0.58$ (night) and $\tau_e$ were found. There are 1 figure, 1 table, and 6 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: July 18, 1958, by N. N. Bogolyubov, Academician

SUBMITTED: July 17, 1958

Card 4/4

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIT, T. A.

В. Л. Гершман,
В. И. Михайлов

О применении спектральной теории турбулентности к задачам рассеяния от нерадиостей [illegible] при [illegible]

В. К. Кинбер,
Ш. Ф. Бахарева,
Т. Г. Тумазович

Функция распределения уровня сигнала (медленные замирания)

10 июня
(с 10 до 16 часов)

В. И. Гершман,
В. И. Дмитриев

К теории образования ионосферных неоднородностей в слое

В. Д. Гусев,
Ю. В. Кушнеревский,
С. Ф. Мирошин

Сопоставление результатов наблюдения за крупными и мелкими неоднородностями в слое $F_2$

В. Д. Гусев,
С. Ф. Мирошин,

Ю. В. Березин,
Ш. Я. Кивинский

О «разрешающей способности» системы, измеряющих горизонтальные размеры ионосферных неоднородностей.

В. Д. Гусев,
Ш. В. Виноградова,
Т. А. Гайлит

Статистические свойства фазы волны, отраженной от ионосферы

В. Д. Гусев,
Т. А. Гайлит

Об автоматизации обработки экспериментальных данных при исследовании нерегулярной ионосферы.

10 июня
(с 10 до 22 часов)

В. А. Воронцова

Расчет надежности связи высокоширотных радиотрасс.

Ш. Г. Шиловский

Графо-аналитический способ расчета линий радиосвязи для различных условий работы.

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORiS), Moscow, 8-12 June. 1959

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIT, T.A.

PHASE I BOOK EXPLOITATION SOV/5135

Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A.S. Popova

100 let so dnya rozhdeniya A.S. Popova; yubileynaya sessiya (One Hundredth Anniversary of the Birth of A.S. Popov; Anniversary Session) (Moscow) Izd-vo AN SSSR, 1960. 312 p. Errata slip inserted. 2,500 copies printed.

Sponsoring Agency: Akademiya SSSR.

Chief Ed.: A.L. Mints, Academician; Editorial Board: G.B. Bardin, A.S. Val'pert, I. Ye. Garun, L. I. Gutenmakher, I.I. Grodnev, S.D. Devyatov, L.A. Zhebulin, S.I. Katayev, N.S. Reyman, V.I. Siforov and S.I. Chistyakov; Ed. of Publishing House: L.V. Sanova; Tech. Ed.: S.G. Markovich.

PURPOSE: This collection of reports is intended for scientists and technicians working in radio engineering and telecommunications.

COVERAGE: The reports included in this collection were submitted at the scientific meeting held in 1959 by the Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A.S. Popova (Scientific and Technical Society of Radio

Card 1/7

Engineering and Telecommunication Named A.S. Popov) in commemoration of the 100th anniversary of A.S. Popov's birth. Only 59 of the more than 300 reports submitted at the meeting are included. The remainder are published in the periodicals of the AS USSR, State Committee, the Ministry of Communications, and the Society Named A.S. Popov. The book contains the reports read at plenary sessions by A.I. Shokhin, Academician, A.A. Pistol'kors, Corresponding Member, AS USSR, and N.I. Adirovich and L.I. Gutenmakher, Professors, as well as those selected as the most interesting given in the following sections by their respective chairmen: Theory of Information, Antenna Systems, Receiving Devices, Wire Communications, Television, Electronics, Radio Measurements, General Radio Engineering, Transmitting Devices, Radio Wave Propagation, Electron Microscopy, Radio Broadcasting, Electroacoustics and Sound Recording, Electronic Computer Engineering, and MHD Ferrite Devices. These chairmen were on the Editorial Board which prepared the papers for publication. References accompany most of the reports.

One Hundredth Anniversary (Cont.) SOV/5135

Khmarov, V.S., M.B. Vinogradova, and Y.A. Gavlit. Statistical Phase Properties of a Wave Reflected From the Ionosphere [illegible]

Furmanov, V.V. and S.Y. Freshmer. Correct Autocorrelation of the Voice Signal 228

Artyunov, N.G. "Ferrographic" Oscillography 235

Gutenmakher, L.I. Electrical Simulation as a New Branch of Radio Electronics 245

Korol'kov, N.V., and V.S. Gavrilov. High-Speed Magnetic Components of the Choke Type 265

Oryashov, N.I., L.S. Levinskiy, and M.A. Tsibrov. An Operating Magnetic Storage With Magnetic Control 271

Krusser, B.V. Image Superorthicon Camera Tube With a "Memory" 279

Card 4/7

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

S/194/61/000/007/064/079
D201/D305

9.9100

AUTHOR: Gusev, V.D., Vinogradova, M.B. and Gaylit, T.A.

TITLE: Statistical properties of phase of a wave reflected from the ionosphere

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1961, 26, abstract 7 I168 (V sb. 100 let so dnya rozhd. A.S. Popova, M., AN SSSR, 1960, 220-227)

TEXT: The possibility is analyzed of determining the laws of distribution of continuous random processes from one experimental recording. The laws are determined of distribution of the irregular part of the phase related to the ionosphere in homogeneities of a wave. 8 references. [Abstracter's note: Complete translation]

VB

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APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GUSEV, V.D.; GAYLIT, T.A.

Automatic processing of experimental data connected with the study of the irregular ionosphere. Vest. Mosk un. Ser. 3 Fiz.,astron 15 no.1:39-47 '60. (MIRA 13:10)

1. Kafedra rasprostraneniya radiovoln Moskovskogo universiteta.
(Ionosphere) (Electronic data processing)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLIT, T.A., GUSEV, V.D.

Electronic correlator for ionospheric measurements.
Mezhdunar. geofiz. god no.8:42-46 '60. (MIRA 13:6)
(Ionospheric research)
(Electronic apparatus and appliances)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

83429

S/188/60/000/001/003/010
E019/B056

9,9100

AUTHORS: Gusev, V. D., Gaylit, T. A.

TITLE: The Automation of Processing Experimental Data in Investigations of the Irregular Ionosphere 12

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya 3, fizika, astronomiya, 1960, No. 1, pp. 39-47

TEXT: As shown by the authors' considerations in the first two parts of the present paper, the structure function of stochastic processes is better suited for the automatic evaluation of results of measurement than the correlation function. In the present paper, the authors investigated the electronic correloscope shown in Fig. 1 as a block diagram, which permits calculation of the structure function of a stochastic process having a spectrum of from 0 to 4 cps, without the necessity of previously recording this stochastic process on a film or a magnetic tape. This correloscope consists of a storage element (capacitor), a subtraction device, and a squaring device, an integrator, a direct-current amplifier, and an indicator tube. By means of this correloscope,

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

83429

The Automation of Processing Experimental Data in Investigations of the Irregular Ionosphere S/188/60/000/001/003/010 B019/B056

the structure function of the stochastic process is constructed from the amplitudes of the reflected signals. Fig. 2 shows the shapes of voltage at various points of the block diagram shown in Fig. 1, whereas Fig. 3 shows the circuit diagram of the subtraction and squaring devices. The correloscope is checked by means of a noise generator; satisfactory results were obtained. The circuit discussed is distinguished by a great simplicity of construction; it requires no special mechanical devices for tape conveyance, and makes it possible to investigate the time-dependent changes in the correlation characteristic of the reflected field. There are 6 figures and 5 references: 4 Soviet and 1 British.

ASSOCIATION: Kafedra rasprostraneniya radiovoln (Chair of Propagation of Radiowaves)

SUBMITTED: June 4, 1959

Card 2/2

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 9975-65 EWT(1)/EWG(v)/FCC/EEC-4/EEC(t)/EWA(h) Po-4/Pe-5/Pq-4/Pae-2/Peb/
P1-4 RAEM(a)/ESD(c)/ESD(t) GM/MS

ACCESSION NR: AP4046281 S/0203/64/004/005/0832/0841

AUTHOR: Gaylit, T. A.; Gusev, V. D.

TITLE: Spectral characteristics of a field during a diffraction on an irregular screen

SOURCE: Geomagnetizm i aeronomiya, v. 4, no. 5, 1964, 832-841

TOPIC TAGS: Fresnel zone, ionosphere, ionospheric electromagnetic field

ABSTRACT: The principal source of information on the nonhomogeneous structure of the ionosphere has been the study of the properties of a nonhomogeneous electromagnetic field which is diffracted in the ionosphere and received at the surface. However, the interpretation of these experimental results involves difficulties. The statistical properties of the wave field at the earth's surface are determined by the conditions for propagation in a nonhomogeneous medium and by propagation in the free space from the layer to the earth. The author refers to the field at emergence from the ionosphere as a field on a screen. With further propagation of a wave from the screen to the plane of observation, the statistical characteristics of the random field change appreciably. The spatial correlation function of the true part of the complex amplitude of the field is

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ACCESSION NR: AP4046281

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also dependent on the distance L to the screen. In a general case this dependence is complex and is integrated to the end only for D≫ l. The properties of the random field are dependent on the value of the parameter D, and also play a major role in problems of diffraction on regular objects. Diffraction on regular limited objects is also characterized by the presence of intensity oscillations of the Fresnel integral type in the diffraction pattern. The problem of diffraction on an irregular screen, together with features in common for all diffraction problems, has a number of peculiarities associated with the presence of two components in the scattered field: coherent and random. This paper, with the foregoing considerations as background, attempts to clarify certain of these peculiarities of the diffraction pattern. Specifically, the spatial energy spectra of field fluctuations and of the square of the amplitude of a field diffracted on an infinite nonhomogeneous screen are expressed at the distance L from the screen through the field spectrum on the screen, determined by the statistical properties of the latter. This dependence is derived for both "weak" and "deep" phase and amplitude screens. When there is a coherent component in the scattered field, the spectrum of the square of the field amplitude, beginning at some distance L from the screen, contains an oscillating term with a frequency which is a multiple of the value of the Fresnel zone. The depth of the oscillations decreases with a decrease in the role of the coherent component in the signal. Orig. art. has: 41 formulas and 2 figures.

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 9976-65

ACCESSION NR: AP4046281

ASSOCIATION: Fizicheskiy fakul'tet, Moskovskiy gosudarstvennyy universitet (Physics Department, Moscow State University)

SUBMITTED: 10Jan64 ENCL: 00 SUB CODE: ES

NO REF SOV: 002 OTHER: 004

Card 3/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 41804-65 EWT(d)/EWT(1)/EEC(k)-2/EWG(v)/FCC/EEC-4/EEC(t)/EWA(h) Pn-4/
Po-4/Pe-5/Pq-4/Pg-4/Pae-2/Pt-7/Peb/PI-4/PI-4 RB/GW/WS-4
ACCESSION NR: AP5005189 S/0203/65/005/001/0081/0089

70
68
B

AUTHOR: Gaylit, T. A.

TITLE: Spectral analysis of the amplitude of a signal reflected from the F2 layer of the ionosphere

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 1, 1965, 81-89

TOPIC TAGS: ionosphere, ionospheric F2 layer, signal amplitude, magento-ionic component, magneto-ionic splitting, signal phase, radio wave propagation

ABSTRACT: A study has been made of the temporal energy spectrum of the amplitude of a signal reflected from the F2 layer of the ionosphere. The changes in signal amplitude with time were recorded with transmitting-receiving apparatus of the type usually used in atmospheric sounding. The work was done in the region of frequencies 4-7 Mc/s for which there is complete splitting of the signal into two magneto-ionic components. For this reason, there was no possibility of the appearance of effects associated with the interference of components. Amplitudes of both magneto-ionic components were recorded and subsequently analyzed simultaneously. Computations were made on an electronic computer. This study revealed that the energy spectrum does not always show a monotonic de-

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L 41804-65 2

ACCESSION NR: AP5005189

crease as would be expected when the signal amplitude is completely random. Instead, against a background of a mean decrease in spectral density with frequency, there are alternating maxima and minima whose positions are not dependent on the processing interval; that is, there is a harmonic line component. The quasi-period of changes in amplitude, determined from the form of the spectrum, is 50-70 seconds and differs appreciably from the expected quadruple half-width of the correlation function $4\tau_0 \approx 8$-20 seconds. The distance between the maxima of spectral density remains approximately constant for a particular measurement interval and varies from 0.015 to 0.02 cps. The mean spectral width for these same intervals falls in the range 0.05-0.2 cps. It is postulated that the line character of the spectrum is due to the presence of deep quasi-periodic changes in signal phase at the point of emergence from the ionosphere with a period of 50-70 sec; this corresponds to a spatial period of 4-5 km when the probable drift velocity is 80 m/sec. "The author thanks V. D. Gusev for valuable advice in the course of this study". Orig. art. has: 8 formulas and 6 figures.

ASSOCIATION: Fizicheskiy fakul'tet, Moskovskiy gosudarstvennyy universitet (Physics Department, Moscow State University)

Card 2/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

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ACCESSION NR: AP5005189

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SUBMITTED: 25Apr64 ENCL: 00 SUB CODE: ES, EC

NO REF SOV: 006 OTHER: 002

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APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 33293-66 EWT(1)/FCC GW

ACC NR: AP6011702 SOURCE CODE: UR/0203/66/006/002/0327/0333

AUTHOR: Gaylit, T. A.

ORG: Physics Department, Moscow State University (Fizicheskiy fakul'tet, Moskovskiy gosudarstvennyy universitet)

TITLE: Measurements of the rapid phase fluctuations of a signal reflected from the ionosphere

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 2, 1966, 327-333

TOPIC TAGS: F layer, phase meter, reflected signal

ABSTRACT: The physical nature of rapid (of the order of seconds) fluctuations of the phase of a signal reflected from a F2 layer is investigated during vertical sounding. A phase meter is described which permits measuring the difference of phases within an accuracy of 3 — 4°. The results of a simultaneous measurement of the fluctuations of amplitude, phase, and rate of change of the phase of a signal reflected from the ionosphere are given. The receiving phase meter consists of two channels. The first channel, forming the signal reflected from the ionosphere contains a mixer in which the carrier frequency of the signal is transformed by a heterodyne, which is common for both channels, to an intermediate frequency of 465 kc, an intermediate-frequency amplifier, a phase inverter, and a paraphase amplifier. From the output of the first channel the voltages are fed to the plates of a display tube, producing a

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ACC NR: AP6011702

circular sweep the diameter of which is proportional to the amplitude of the signal reflected from the ionosphere. The second channel of the phase meter, forming the reference signal, consists of a mixer, intermediate-frequency amplifier and a pulse shaper which transforms the reference signal into short triangular pulses corresponding to the zeros of the reference signal. Measurements of the parameters of a signal reflected from the ionosphere by means of this phase meter were made during January-March 1965. The measurements were made at frequencies at which magnetoionic splitting is observed, simultaneously for both components. Recording was done at a rate of 2 frame/sec. The duration of the 30 analyzed measurement sessions varied from 2 to 3.5 min. The changes in time of the amplitude, difference of phases of the reflected and reference signals, and the rate of change of the phase were obtained. All three quantities experienced rapid (in seconds) and slow (several minutes) changes. The rapid fluctuations of the signal are associated with scattering by small-scale irregularities of the electron concentration in the ionosphere which have a spatial dimension of the order of hundreds of meters. The Fresnel zone forming the reflect signal contains numerous such irregularities. The reflected signal consists of a "mirror" component and a random component which is the result of the superposition of numerous independent waves scattered by individual irregularities. In the limiting case of an infinitely large number of independent waves the random component of the field has a normal distribution. In terms of the diffraction theory this case corresponds to Fraunhofer diffraction. This model satisfactorily explains a number of experimental data, especially with respect to measurements of the amplitude of a reflected signal. The experimental results can be more satisfactorily

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L 33293-66

ACC NR: AP6011702

explained if one assumes that along with scattering by small-scale irregularities the cause for rapid fluctuations of the signal is the scattering by larger irregularities. The author thanks V. D. Gusev for his valuable advice. Orig. art. has: 5 figures and 3 formulas.

SUB CODE: 04, 09 / SUBM DATE: 26Jul65 / ORIG REF: 008 / OTH REF: 001

Card 3/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

35295

S/197/62/000/002/003/003
B104/B138

24.6710

AUTHOR: Gaylitis, A.

TITLE: Heating of a heavy charge in an electron plasma

PERIODICAL: Akademiya nauk Latviyskoy SSR. Izvestiya, no. 2 (175), 1962, 83 - 87

TEXT: The heating of a particle of mass M with a charge e, which is introduced into an electron plasma of temperature T, is studied. Heating of this particle is understood to mean the reaching of the mean kinetic energy of electrons by collisionswith it. $M \gg m$, where m is the electron mass. At the instant t = 0, the particle is in the origin of coordinates. It is calculated how much energy the particle receives per unit time from the electrons which are in the radius $R \ll n^{-1/3}$, where n is the electron density. Outside R, an electron moves rectilinearly, and inside R, in a potential field:

$$u = \begin{cases} e^2\left(\frac{1}{r} - \frac{1}{R}\right) & r \leqslant R \\ 0 & r \geqslant R \end{cases}.$$

. The particle trajectory is

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calculated in agreement with L. Landau et al. (Mekhanika. M., 1958). The energy afflux

$$\dot{W}_1 = \frac{4e^4 n}{M}\sqrt{\frac{2\pi m}{kT}}\left\{ln\frac{2RkT}{e^2} - C - \frac{1}{2} + 0\left(\frac{e^2}{RkT}\right)\right\} \qquad (4)$$

is obtained for Maxwellian velocity distribution of electrons.

$$\dot{W}_2 = \frac{2kTe^2}{\sqrt{2\pi}a^3\omega_0 M}\left\{1 - C - ln\,2\frac{R}{a} + O[R^2/a^2]\right\}$$ (11) is obtained for the energy afflux if $R \gg n^{-1/3}$.

$$\dot{W} = \dot{W}_1 + \dot{W}_2 = \frac{4e^4 n}{M}\sqrt{\frac{2\pi m}{kT}}\left\{ln\,\Lambda + O\left(\frac{e^2 n^{1/3}}{\kappa T}\right)\right\}$$

$$\Lambda = \frac{(kT)^{3/2}}{2e^3\sqrt{\pi n}}\,exp\{1/2 - 2C\}.$$

(14) is obtained by extrapolation of (4) and (11) in the range $R \sim n^{-1/3}$. V. I. Kogan is thanked for discussions. A. I. Larkin (ETEF, 1959, 37, 264) is mentioned. There are 7 references: 6 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: R. Cohen, L. Spitzer, R. Routly.



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B104/B138

Heating of a heavy ...

Phys. Rev., 80, 230 (1950).

ASSOCIATION: Institut fiziki AN L[illegible] SSR (Institute of Physics AS Latviyskaya SSR)

SUBMITTED: June 16, 1961

Card 3/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 15213-65 EWG(j)/EWA(k)/FBD/EWT(1)/EEC(k)-2/T/EEC(t)/EEC(b)-2/EWP(k)/EWA(m)-2/
EWA(h) Pn-4/Po-4/Pf-4/Pi-4/Pl-4/Peb ASD(a)-5/AFMDC/AFETR/RAEM(a)/AFTC(p)/ESD(t)/
ACCESSION NR: AP4048258 ESD(gs)/IJP(c) S/0141/64/007/004/0646/0651
WG

AUTHOR: Gaylitis, A.

TITLE: Scattering of light by a charge moving in a medium B

SOURCE: IVUZ. Radiofizika, v. 7, no. 4, 1964, 646-651

TOPIC TAGS: light scattering, Cerenkov effect, laser beam 25

ABSTRACT: The author analyzes the interaction between a powerful light beam from a laser and a rapidly moving charge in a medium, and the changes that the scattering of the light produce in the spectrum of the spontaneous Cerenkov emission from the charge. The calculations are made for both subluminal and superluminal charge velocity. It is shown that as the charge velocity approaches the velocity of light in the medium, the scattering of the light increases greatly. The resultant broadening of the Cerenkov line is calculated and its shape estimated. "The author thanks V. N. Tsy*-

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 15213-65
ACCESSION NR: AP4048258

tovich for guidance." Orig. art. has: 21 formulas.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR (Physics Institute, AN SSSR)

SUBMITTED: 06Jun63 ENCL: 00

SUB CODE: OP, EC NR REF SOV: 002 OTHER: 003

Card 2/2

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 38108-65 EWT(1)/EPF(n)-2/EWG(m)/EPA(w)-2 Pz-6/Po-4/Pab-10/Pi-4
IJP(c) WW/AT

ACCESSION NR: AP5006032 S/0141/64/007/006/1190/1193

AUTHOR: Gaylitis, A.; Tsytovich, V. N.

TITLE: Contribution to the theory of nonlinear interaction of transverse and longitudinal plasma waves

SOURCE: IVUZ. Radiofizika, v. 7, no. 6, 1964, 1190-1193

TOPIC TAGS: plasma wave interaction, nonlinear interaction, wave scattering, transition radiation

ABSTRACT: The purpose of the analysis is to show that nonlinear interaction of longitudinal waves with transverse ones can be appreciable and in some cases more significant than the interaction between longitudinal waves only. Nonlinear interaction is considered between plasma waves, both transverse and longitudinal, with frequencies close to the Langmuir oscillations frequency of an isotropic plasma. At these frequencies the transformation of longitudinal waves into transverse ones and vice versa occurs essentially on the thermal particles of the plasma, and the nonlinear effects are due to induced scattering. Equations are

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ACCESSION NR: AP5006032

3

derived for the probability of scattering of longitudinal waves by a particle and conversion into a transverse wave, for the scattering of a longitudinal wave and conversion into a longitudinal wave with account of transition-radiation effects, for the probability of emission of two plasma waves, and for the induced-scattering effects. Estimates are presented for the order of magnitude of the characteristic time of buildup of the resultant transverse waves. "The authors thank V. P. Silin and L. M. Kovrizhnykh for useful remarks." Orig. art. has: 14 formulas.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR (Physics Institute, AN SSSR)

SUBMITTED: 17Apr64 ENCL: 00 SUB CODE: ME

NR REF SOV: 011 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

ACCESSION NR: AP4037586 S/0056/64/046/005/1726/1740

AUTHOR: Gaylitis, A.; Tsy*tovich, V. N.

TITLE: Radiation of transverse electromagnetic waves due to scattering of charged particles by plasma waves

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 5, 1964, 1726-1740

TOPIC TAGS: plasma, plasma waves, dipole radiation, particle scattering, electron scattering, plasma wave scattering, synchrotron radiation

ABSTRACT: It is shown that in the classical limit, emission of transverse waves by electrons with energies exceeding those of thermal electrons occurs in the field of a plasma wave as a result of dipole radiation due to oscillations of the electron in the wave (Compton effect on plasma waves) and by passage of electrons through density inhomogenieties produced by the plasma wave. In the non-relativistic case, emission of transverse waves by electrons is forbidden, due to interference of the two effects. This forbiddenness

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ACCESSION NR: AP4037586

does not hold for particles with masses differing from that of the electron. The radiation spectrum of electrons and ions is calculated for a broad energy range from nonrelativistic to relativistic energies. The graph technique is used for calculating quantum effects which become significant for secondary quantum energies close to the energy of the charged particles. Possible astrophysical applications are discussed as well as the possibility of determining the particle energy and mean energy density of the plasma waves on basis of the intensity of radiation. It is also shown that the frequencies of transverse waves produced in scattering of cosmic ray electrons by plasma waves may considerably exceed the frequency of waves produced by the synchrotron mechanism. Orig. art. has: 65 formulas and 7 figures.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR (Physics Institute, Academy of Sciences SSSR)

SUBMITTED: 11Oct63 DATE ACQ: 09Jun64 ENCL: 00

SUB CODE: ME NO REF SOV: 017 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 15312-65 EWT(1)/EWG(k)/EPA(sp)-2/EPA(w)-2/EEC(t)/T/EEC(b)-2/EWA(m)-2
Pz-6/Po-4/Pab-10/Pi-4 IJP(c)/SSD(b)/SSD/AEDC(b)/ASD(a)-5/AFWL/AFMDC/
AFETR/RAEM(a)/RAEM(c)/ESD(gs) AT
ACCESSION NR: AP4047914 S/0056/64/047/004/1468/1482

AUTHORS: Gaylitis, A.; Tsy*tovich, V. N.

TITLE: Radiation emitted by charged particles scattered by electromagnetic waves in an isotropic plasma

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 4, 1964, 1468-1482

TOPIC TAGS: particle scattering, plasma charged particle, plasma radiation, isotropic plasma, plasma wave propagation, nonlinear plasma, Cerenkov radiation

ABSTRACT: Radiation from charged particles colliding with plasma waves are of interest from the point of view of astrophysics and from the point of view of nonlinear effects arising when waves interact in a weakly-turbulent plasma. It was shown by one of the authors (Tsy*tovich, Astronom. zh., v. 40, 612, 1963; Izv. vuzov,

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ACCESSION NR: AP4047914

Radiofizika, v. 5, 1078, 1962) that super-thermal charged particles are accelerated by plasma waves in a weakly turbulent plasma. The nonlinear effects arising during such an acceleration can be investigated with the aid of the cross sections for the scattering of longitudinal waves by an arbitrary charge moving in the plasma, which are calculated in this article with allowance for the nonlinearity of the plasma. The variation of the cross section for Cerenkov radiation of longitudinal waves by a charged particle, due to these nonlinear effects, is considered. The results are valid for arbitrary particle velocities and arbitrary wave phase velocities. This makes it possible to obtain with the aid of the calculated cross sections the kinetic equations that describe the nonlinear effects in a plasma of arbitrary temperature, including ultrarelativistic effects. These nonlinear equations take into account both the interaction of longitudinal waves, and the nonlinear interaction between transverse and longitudinal waves. The results can be used to estimate the role of the nonlinear effects when cosmic rays are

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L 15312-65
ACCESSION NR: AP4047914

accelerated by plasma waves. Orig. art. has: 2 figures and 59 formulas.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR (Physics Institute, Academy of Sciences SSSR)

SUBMITTED: 15Apr64 ENCL: 00

SUB CODE: ME, NP NR REF SOV: 025 OTHER: 003

Card 3/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLITIS, A.K.

Voprosy Magnitnoy Gidrodinamiki i Dinamiki Plazmy. Trudy Konferentsii Po Magnitnoy Gidrodinamike, Riga, 2-10 Iyulya 1958 g. (Problems of Magnetohydrodynamics and Plasma Dynamics. Works of the Conference On Magnetohydrodynamics, Riga, 2-10 July 1958), Riga, 1959, 339 pp

The majority of the texts of the 55 conference reports and discussions of reports are presented in the source in abridged form. Previously published reports are included there as brief abstracts only. The material published there for the first time (abridged and unabridged) are as follows:

"Similarity Methods and Physical Modeling in the Study of Electromagnetic Processes in Liquid Metals," by I. M. Kirko, Riga, pp 201-210 (Discussion on the Report by D. A. Frank-Kamenetskiy, Moscow, p 211; Discussion on the Report by I. M. Kirko, Riga, pp 211-213)

(Abstract of article, "Model of an Infinitely Long Channel With Liquid Metal Located In a Traveling Magnetic Field," by I. M. Kirko, Ya. Ya. Klyavin', I. A. Tutin /deceased/, and L. Ya. Ul'manis, Riga, already published in Nauchnyye Doklady Vysshey Shkoly, Energetika, 3, 1958, p 203, is supplemented by a discussion of the article by I. M. Kirko, Riga, pp 214-220)

"Principle of Modeling the Electrical Field of Electromagnetic Pumps in an Electrolytic Bath and on Electrically Conducting Paper," by L. V. Ritsetskiy, Riga, pp 221-225 (Discussion of Article by A. I. Vol'dek, Tallin, p 226)

(Abstract of article, "The Motion of a Sphere in a Viscous Conducting Liquid Within a Longitudinal Magnetic Field," by A. K. Gaylitis, Riga, p 227, is supplemented by discussion of the report by Ye. P. Velikhov, Moscow, pp 227-223.)

"Experimental Investigation of the Magnetohydrodynamic Phenomena During the Damping of the Oscillatory Motion of Mercury in a Tube," by A. G. Smirnov and N. S. Kozhanova, Perm', pp 233-235; discussion by A. E. Mikel'son, Riga, and O. A. Liyelausis, Riga, p 236

"On the Behavior of Colloidal Ferromagnetic Particles in a Nonhomogeneous Magnetic Field," by E. I. Yeremin, Moscow (abstract), p 237

"Study of Magnetic Fields and Electromagnetic Processes in Linear Induction Pumps," by A. I. Vol'dek, Tallin, pp 239-246

"Choice of Basic Parameters of Induction Pumps in the Calculation of Maximum Efficiency," by E. K. Yankop, Riga, pp 247-250; discussion of report by Yu. K. Krumin', Riga, p 251

"Optimum Utilization of Induction Pump Design," by L. G. Savin, Riga, pp 253-260

"Experience in the Devising of Electromagnetic Pumps at the Institute of Physics of the Academy of Sciences Latvian SSR," by P. G. Kirillov, Ya. Ya. Liyelpeteris, A. E. Mikel'son, and G. A. Okunev, Riga, pp 261-268; discussion of report by N. M. Turchin, Moscow, p 269

"On the Use of Induction Pumps in Foundary Practice and the Metallurgical Industry," by L. A. Verte, Moscow, (abstract) p 271

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

ACCESSION NR: AP4017032 S/0141/63/006/006/1103/1114

AUTHORS: Gaylitis, A. K.; Tsy*tovich, V. N.

TITLE: Effect of the medium on the synchrotron acceleration of relativistic particles

SOURCE: IVUZ. Radiofizika, v. 6, no. 6, 1963, 1103-1114

TOPIC TAGS: relativistic particle, synchrotron acceleration, relativistic electron, radio astronomy, acceleration by radiation, optical synchrotron radiation, synchrotron electron loss, Compton effect, inverse Compton effect, earth radiation belt, chromosphere flare,

ABSTRACT: The authors study the acceleration of relativistic electrons moving in a magnetic field, brought about by transverse electromagnetic waves for which the deviation of the dielectric constant from unity can be appreciable. The energy acquired by the particle

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ACCESSION NR: AP4017032

is calculated and the dependence of the particle acceleration on its energy is analyzed. The possible role played by such an acceleration mechanism in discrete radioastronomy sources is considered. It is pointed out that ultrarelativistic electrons can become selectively accelerated by transverse electromagnetic waves and thus offset possible synchrotron losses. The fact cited as evidence in favor of this assumption is that the Crab nebula shows no variation in the optical synchrotron radiation, although synchrotron losses of electrons should be appreciable in this energy region. It is also pointed out that acceleration by transverse waves during the initial stage of supernova envelope expansion resolves some of the difficulties connected with the inverse Compton effect. It is deduced from the results of the article that it is possible for electrons to become accelerated to an energy 2--10 MeV in the internal regions of the outer radiation belt. Consequently fast electrons should be produced whenever radio emission from a chromosphere flare passes through the inner zone of the radiation belt.

Card 2/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLITIS, A.K.; TSYTOVICH, V.N.

Acceleration by radiation and the generation of fast particles under cosmic conditions. Part 3: Time measurements of the intensity of radio-emission sources. Astron. zhur. 41 no.3: 452-463 My-Je '64. (MIRA 17:6)

1. Fizicheskiy institut im. P.N. Lebedeva AN SSSR.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

SOV/137-59-3-6388

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 208 (USSR)

AUTHORS: Straume, I., Gaylitis, M.

TITLE: Nonmetallic Inclusions in Steel Castings of the Riga Railroad-car Plant (RVZ) and the Riga Electric-machinery Plant (REZ) [ Nemetallicheskiye vklyucheniya v stal'nom lit'ye Rizhskogo vagonostroitel'nogo (RVZ) i Rizhskogo elektromashinostroitel'nogo (REZ) zavodov ]

PERIODICAL: Tr. 3-y Stud. nauchno-tekhn. konferentsii Pribaltiki i BSSR, Riga, 1958, pp 62-70

ABSTRACT: The content and mineralogical composition of the nonmetallic inclusions in 20L and 30L steels smelted in an acid electric furnace and a basic open-hearth furnace were determined. No relationships between the content of inclusions and the mechanical properties of the steel were brought to light.

T. F.

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 10204-63 EWT(1)/EWP(q)/EWT(m)/BDS--AFFTC/ASD--JD

ACCESSION NR: AP3000063 S/0056/63/044/005/1644/1649

AUTHOR: Gaylitis, M.; Damburg, R.

54
55

TITLE: Singularities of the threshold behavior of the cross section for excitation of hydrogen by electrons, due to the existence of a linear Stark effect in hydrogen

21

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 44, no. 5, 1963, 1644-1649

TOPIC TAGS: Hydrogen excitation by electrons, threshold behavior, linear Stark effect

ABSTRACT: The cross sections for inelastic transitions near threshold (provided one of the particles is charged in the final state) depend, in the case of short-range forces, on the energy as k sub f raised to the 2 l sub f + 1 power, where k sub f and l sub f are the momentum and the angular momentum in the final state. If l sub f = 0, then the cross sections in the old channels have at threshold energy a singularity of the type of a peak or a step. It is shown that when a hydrogen atom is excited with electrons these laws are

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L 10204-63
ACCESSION NR: AP3000063

violated as a result of the strong polarized interaction between the departing electron and the hydrogen atom in the excited state. The cross sections oscillate near the threshold. The inelastic cross sections tend to zero only at energies on the order of the relativistic level splitting. Orig. art. has: 29 formulas.

ASSOCIATION: Institut fiziki Akademii nauk Latviyskoy SSR (Institute of Physics, Academy of Sciences, Latvian SSR)

SUBMITTED: 15Dec62 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: PH NR REF SOV: 004 OTHER: 008

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APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

L 13632-63 BDS

ACCESSION NR: AP3003128 S/0056/63/044/006/1974/1981

47
46

AUTHOR: Gaylitis, M.

TITLE: Cross section behavior near threshold of a new reaction in the case of a Coulomb attraction field

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 1974-1981

TOPIC TAGS: elastic scattering, cross sections, Coulomb field, polarization forces, effective radius theory, threshold behavior

ABSTRACT: Expressions are obtained for the jumps in the averaged partial cross sections, widths, and resonance shifts for elastic interactions, by generalizing the multi-channel effective radius theory to the case of a Coulomb attraction field. It is shown that the expressions derived are applicable also for the case of excitation of hydrogen-like ions by electrons where polarization forces proportional to the inverse cube of the radius act between the scattered electron and ion in the excited states, in addition to the Coulomb forces. It is thus shown that this theory leads to the presence of resonances in cross sections below the threshold of the new reaction. Orig. article has 32 formulas.

Association: Inst. of Physics, Academy of Sciences, Latvian SSR

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

ACCESSION NR: AP4042384 S/0056/64/047/001/0160/0166

AUTHOR: Gaylitis, M.

TITLE: Extremal properties of approximate methods of collision theory in the presence of inelastic processes

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 1, 1964, 160-166

TOPIC TAGS: elastic scattering, inelastic scattering, operator function, scattering amplitude, particle collision

ABSTRACT: In view of the fact that the existing methods for finding the higher and lower limits of the scattering phase shifts are too cumbersome for extensive practical use, the author shows that at energies in which both elastic and inelastic scattering is possible, the scattering matrix has a monotonic dependence on the potential energy operator. It is shown that a broad class of approximate methods results in a lower approximation for the reactance



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ACCESSION NR: AP4042384

matrix K, and therefore the scattering matrix S is connected with its approximate value $S_t$ by a relation $S = S_t \exp(2i\gamma_t)$, where $\gamma$ is a matrix having a non-negative quadratic form, which approaches zero monotonically as the space of the trial functions is broadened. This behavior is made possible by the monotonic connection between the potential-energy operator in the Schroedinger equation and the reactance matrix, and by the fact that the neglect of part of the possible intermediate states in the approximate calculation is equivalent to adding a positive operator to the potential-energy operator. It is shown that many other numerical methods give a lower approximation for the reactance matrix. It is mentioned in a postscript that a recent paper by Y. Hahn et al. (Phys. Rev. 134, B397, 1964) contains deductions close to those of the authors. "I am deeply grateful to R. Peterkop, R. Damburg, and E. Karule for numerous discussions." Orig. art. has: 26 formulas.



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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

ACCESSION NR: AP4042384

ASSOCIATION: Institut fiziki Akademii nauk Latviyskoy SSR (Institute of Physics, Academy of Sciences, Latvian SSR)

SUB CODE: NP, MA NR REF SOV: 003 OTHER: 014

3/3

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

ACCESSION NR: AT4001256 S/2668/63/000/013/0111/0113

AUTHOR: Gaylitis, M. K.

TITLE: Resonances in electron scattering on ions

SOURCE: AN LatSSR. Institut fiziki. Trudy*, no. 13, 1963, 111-113

TOPIC TAGS: resonance, nuclear resonance, nuclear magnetic resonance, electron scattering, electron ion scattering, ion scattering, resonance theory, positive ion, hydrogen ion

ABSTRACT: The formulas derived by the author elsewhere (AN LatSSR, Institut fiziki, Trudy, No. 13, 1963, p. 99) are employed to estimate the order of magnitude of the resonance effects in the scattering of electrons by positive hydrogen ions. The results show that the cross section curves averaged over the resonances are similar for different values of Z and differ by a factor $1/Z^4$. The larger Z, however, the smaller the relative width of the resonance (propor-

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ACCESSION NR: AT4001256

tional to $1/Z^2$) and their shift (proportional to $1/Z$) and the larger the height of the resonances (proportional to $Z^2$), relative to the average cross section. Orig. art. has: 7 formulas and 1 table.

ASSOCIATION: Institut fiziki AN LatSSR (Physics Institute AN LatSSR)

SUBMITTED: 00 DATE ACQ: 10Dec63 ENCL: 00

SUB CODE: PH, NS NO REF SOV: 003 OTHER: 000

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APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

S/051/63/014/004/003/026
E039/E420

AUTHOR: Gaylitis, M.K.

TITLE: The calculation of the excitation of ions by electrons using coulomb wave functions

PERIODICAL: Optika i spektroskopiya, v.14, no.4, 1963, 465-470

TEXT: The case when it is possible to find an analytic expression for the excitation cross-section of ions without expanding the wave function of the continuous spectrum is examined. The calculations are made on a computer. Results of calculations on the S - S transitions for hydrogen-like ions show that the cross-section as a function of p/Z is approximately inversely proportional to $Z^4$ or the square of the transition energy (p is the electron momentum). The deviation from this proportionality for the cross-section of different ions shows an order difference compared with the values obtained by L.A.Vaynshteyn (Opt. i spektr., v.11, 1961, 301) for $C^{5+}$ by the numerical integration of Schrödinger's equation. A numerical calculation is also carried out on the cross-section of optical allowed transitions in the dipole approximation for any ions using the formula

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$$\sigma_{i\to f} = \frac{s_{i\to f}}{(\Delta E)^2}\,\sigma_0\left(\frac{\Delta E}{z^2}, \frac{E}{\Delta E}\right) \qquad (12)$$

where $s_{i\to f}$ is the oscillator force, $\Delta E$ - the transition energy and $E$ - the energy of the incident electron. In the limit of large values of $\Delta E/z^2$ the cross-section always decreases with increasing $E$. With excitation by optical electrons $\Delta E/z^2 < 3$ the cross-section decreases monotonically with increasing $E$ and is weakly dependent on $\Delta E/z^2$. There are 4 figures.

SUBMITTED: July 12, 1962



APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLITIS, Ya.

Changing the system of operating indexes for truck fleets. Avt. transp. 32 no.9:9-10 S '54. (MLRA 7:11)

1. Ministerstvo avtomobil'nogo transporta i shosseynykh dorog Latviyskoy SSR.
(Motor trucks)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

SHISHKOVA,Z.; GAYLITIS,Yu.[Gailitis,J.]

Concerning the formation of acids in the fermentation of sugars. In Russian. Vestis Latv ak no.3:141-144 '60. (KEAI 10:7)
(Fermentation) (Acids) (Sugar)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

SHISHKOVA, Z.; KAL'NINA, V. [Kalnina, V.]; GAYLITIS, Yu. [Gailitis, J.]

Growing forage yeast on peat hydrolysates. Izv. AN Latv.SSR no.11:91-95 '63. (MIRA 17:4)

1. Institut lesokhozyaystvennykh problem i khimii drevesiny AN LatvSSR.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLOMAZOV, Dzeron Kaprelovich; SMIRNOV, German Pavlovich, inzh.; BESSTRASHNIKOVA, M.I., red.

[Beacons of Don highways] Maiaki Donskikh avtostrad. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1962. 61 p. (MIRA 17:3)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

BAROYAN, O.V.; GAYLONSKAYA, I.

Role and site of subclinical and latent forms of poliomyelitis and their significance in the development of epidemic processes. Zhur.mikrobiol.epid.i immun. 31 no.11:122-132 N '60. (MIRA 14:6)
(POLIOMYELITIS)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLONSKAYA, I. N. Cand Med Sci -- (diss)"~~The~~ Saliva as a ~~factor in XXXXX~~ Natural Immunity ~~to~~ Factor in Influenza." Mos, 1957. 11 pp 20 cm. (Academy of Medical Sciences, USSR), 200 copies (KL, 18-57, 98)



APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLONSKAYA, I.N.

Effect of human saliva on the adsorptive capacity of the influenza virus [with summary in English] Vop. virus, 2 no.1:22-25 Ja-F '57 (MLRA 10:5)

1. Laboratoriya immunologii Instituta virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(SALIVA, eff.
on adsorptive capacity of influenza virus) (Rus)
(INFLUENZA VIRUSES
eff. of saliva on adsorptive capacity) (Rus)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLONSKAYA, I.N.

Action of saliva on the viability of influenza virus. Vop.virus 3 no.3:174-175 My-Je '58 (MIRA 11:7)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(INFLUENZA VIRUSES,
viability, eff. of saliva (Rus))
(SALIVA, eff. of saliva
on viability of influenza viruses (Rus))

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

KOSYAKOV, P.N.; GAYLONSKAYA, I.N.

Specific ABO group polysaccharides in saliva in normal subjects and in influenza. Vop. virus. 4 no.1:46-50 Ja-F '59. (MIRA 12:4)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(INFLUENZA, immunol.
ABO antigens in saliva (Rus))
(SALIVA,
ABO antigens in influenza (Rus))
(BLOOD GROUPS,
ABO antigens in saliva in influenza (Rus))

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

BAROYAN, O.V.; GAYLONSKAYA, I.N.

Practical significance of dissemination of the vaccinal strain of poliomyelitis virus among contacts of vacinees. Vop.virus. 6 no.5:532-538 S-O '60. (MIRA 14:7)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(POLIOMYELITIS)

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

BAROYAN, O.V.; GAYLONSKAYA, I.N.; GRIGORYAN, I.K.

Enteroviruses and their role in human infectious pathology; aseptic serous meningitis. Sov.med. 25 no.1:53-64 Ja '61. (MIRA 14:3)

1. Iz Instituta virusologii AMN SSSR i Primorskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(VIRUS DISEASES) (MENINGITIS)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

BAROYAN, Oganes Vagarshakovich; GAYLONSKAYA, Irina Nikolayevna; PARNES, Ya.A., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Intestinal viruses and the diseases caused by them] Kishechnye virusy i vyzyvaemye imi zabolevaniia. Moskva, Medgiz, 1962. 149 p. (MIRA 16:5)
(COXSACKIE VIRUSES) (ECHO VIRUSES)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLONSKAYA, I.N., kand med.nauk; VASIL'YEVA, V.I., kand.med.nauk

Diseases caused by enteroviruses. Med. sestra 22 no.5:23-27 My '63. (MIRA 16:8)

1. Iz Instituta virusologii AMN SSSR imeni D.I.Ivanovskogo
(INTESTINES—MICROBIOLOGY)
(VIRUS DISEASES)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

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(2)

CZECHOSLOVAKIA

STEPAN, V; VODEHNAL, J; KOSSLER, I; GAYLORD, N.G

1. Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague - (for Stepan, Vodehnal and Kossler). 2: Gaylord Associates Inc., Newark, U.S.A - (for Gaylord)

Prague, Collection of Czechoslovak Chemical Communications, No 7, July 1966, pp 2878-2888

"Cyclo- and cyclized diene polymers. Part 6: Infra-red spectra of cyclopolycyclopentadiene and polycyclopentadienes."

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLUMS, V. S.

USSR/Cultivated Plants.- Fodder

M-6

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1628

Author : Yu.A. Shtikans, V.S. Gaylums
Inst : Not Given
Title : Experiment to Cultivate Alfalfa

Orig Pub : Zhivotnovodstvo, 1957, No 3, 87-89

Abstract : No abstract

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLYAVICHUS, P.P.

Significance of a novocaine block in the treatment of patients with chronic trichophytosis. Vest.derm.i ven. 34 no.12:19-22 '60. (MIRA 14:1)

1. Iz Kayshyadorskoy rayonnoy bol'nitsy Litovskaya SSR (nauchnyy rukovoditel' - dotsent L.I. Fandeyev).
(RINGWORM) (NOVOCAINE)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

KYASMINAS, A.P. [Kesminas, A.]; GAYLYUSHIS, B.V. [Gailiusis, B.]

Study of the statistical parameters of monthly discharges of the Neman River. Trudy AN Lit. SSR Ser. B no.3:163-171 '63.
(MIRA 18:3)

1. Institut energetiki i elektrotekhniki AN Litovskoy SSR.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

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GAYLYUSHIS, B.V. [~~Gailiusis, B.~~]

Forecast of the spring flow of the Neman and Viliya Rivers by the indirect characteristics of the autumn soil moisture. Trudy AN Lit. SSR. Ser. B no.2:193-198 '64.

(MIRA 18:3)

1. Institut energetiki i elektrotekhniki AN Litovskoy SSR.

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYLYUSHIS, B.V. [Gailiusis, B.]; BURNEYKIS, Yu.P. [Burneikis, J.]

Forecast of the spring flow of the Neman and Viliya Rivers by the method of water balance. Trudy AN Lit. SSR. Ser. B no.2: 199-209 '64. (MIRA 18:3)

1. Institut energetiki i elektrotekhniki AN Litovskoy SSR.

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GAYLYUSHIS, B.V. [Gailiusis, B.]; BURAUYKIS, Yu.P. [Burauskis, J.]

Effect of annual water content on the coefficient of streamflow irregularity during the year in the Lithuanian S.S.R. Trudy AN Lit. SSR. Ser. B no.3:195-204 '64. (MIRA 18:5)

1. Institut energetiki i elektrotekhniki AN Litovskoy SSR.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

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BURNEYKIS, Yu.P. [Burneikis, J.]; GAYLYUSHIS, B.V. [Gailiusis, B.]

Indices of year-to-year irregularity of streamflow of the Lithuanian SSR and their dependence on local physicogeographic factors. Trudy AN Lit.SSR. Ser. B. no.2:263-272 '65. (MIRA 19:2)

1. Institut energetiki i elektrotekhniki AN Litovskoy SSR. Submitted November 19, 1964.

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GAYNANOV, S.A.

BARDIN, I.P.; BORISOV, A.F.; BELAN, R.V.; YERMOLAYEV, G.I.; VAYSBERG, L.E.; ZHEREBIN, B.N.; BORODULIN, A.I.; SHAROV, G.V.; DOMNITSKIY, I.F.; CHUSOV, F.P. SOROKO, L.N.; KLIMASENKO, L.S.; PAVLOVSKIY, S.I.; ZIL'BERSHTEYN, M.B.; LYULENKOV, I.S.; NIKULINSKIY, I.D.; BRAGINSKIY, I.A.; SALOV, Ye.M.; TROSHIN, N.F.; PETRIKEYEV, V.I.; ARGUNOV, M.I.; DUL'NEV, F.S.; BIDULYA, L.N. GAYNANOV, S.A.; FROLOV, N.P.; VINICHENKO, V.S.; KOGAN, Ye.A.

G.E.Kazarnovskii; obituary. Stal' 15 no.8:757 Ag'55. (MLRA 8:11)
(Kazarnovskii, Grigorii Efimovich, 1887-1955)

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

15-57-12-17106

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12, p 59 (USSR)

AUTHOR: Gaynanov, A. G.

TITLE: Pendulum Determinations of Gravity in the Sea of Okhotsk and in the Northwestern Part of the Pacific Ocean (Mayatnikovyye opredeleniya sily tyazhesti v Okhotskom more i v severozapadnoy chasti Tikhogo okeana)

PERIODICAL: Tr. In-ta okeanol. AN SSSR, 1955, Vol 12, pp 145-154

ABSTRACT: Bibliographic entry

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ZOMMER, I.E., kand.geol.-mineral.nauk; GAYNANOV, A.G., inzh.

Gravimetric operations in Antarctica. Inform. biul. Sov. antark. eksp. no.19:39-42 '60. (MIRA 13:9)

1. Moskovskiy gosudarstvennyy universitet.
(Antarctic regions--Gravity)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

S/169/62/000/001/010/083
D228/D302

AUTHOR: Gaynanov, A. G.

TITLE: Pendulum determinations of the force of gravity during the first Antarctic voyage of the D/E "Ob'"

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1962, 22, abstract 1A171 (Inform. byul. Sov. antarkt. ekspeditsii, no. 22, 1960, 48-50)

TEXT: Determinations of the force of gravity were carried out by means of the tripendulum device of the Askania Werke [Abstractor's note: Askania Works] with invar minimal pendulums converted for marine observations. The observations were, on the whole, conducted when the ship was stationary, since the influence of vibration strengthens during mobile observations. Data on the gravitational field of the coastal zone of Antarctica's Indian sector were obtained on the basis of the executed work. [Abstractor's note: Complete translation.]

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYNANOV, A.G., red.; YERMAKOV, M.S., tekhn. red.

[Gravimetric investigations at sea] Morskie gravimetricheskie issledovaniia; sbornik statei. Moskva, Izd-vo Mosk. univ. No.1. 1954-1958. Pod red. V.V.Fedynskogo. 1961. 110 p. (MIRA 15:3)

1. Moscow. Universitet.

(Gravimetry)

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"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

GAYNANOV, A.G.

Gravimetric determinations on teh Ob' disel-electric ship on the first Antarctic voyage. Mor.grav.issl. no.1:23-36 '61. (MIRA 15:12)

(Antarctic regions—Gravimetry)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R000514520017-6

S/169/62/000/004/011/103
D228/D302

AUTHOR: Gaynanov, A. G.

TITLE: Gravimetric determinations in Antarctica, the Atlantic Ocean, and the Mediterranean on the ninth voyage of the "Slava" whaling fleet

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 4, 1962, 18, abstract 4A139 (V sb. Morsk. gravimetr. issledovaniya, no. 1, M., Mosk. un-t, 1961, 8-22)

TEXT: Upwards of 380 gravity measurements were made with two triple-pendulum instruments (Cambridge and "Askania-Werke"), adapted for marine conditions. Brass Shternek-type pendulums were used in the Cambridge instrument, minimal invar pendulums being employed in the "Askania-Werke" device. The pendulum instruments were fitted with a photorecorder, contact chronometers, and short-period (0.25 sec) damping pendulums for registering the instrumental inclination. The initial and the final observations were carried out in Moscow, the control observations being made at moorings in the

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ports of Montevideo and Gibraltar. The accuracy of determining the Bouguer anomalies is estimated at an error of ± 17 milligals for the Cambridge instrument's measurements and at an error of ± 18 milligals for those with the "Askania-Werke" instrument. The possibility of satisfactory measurement with a pendulum instrument, when a vessel is moving in a swell of 3 - 4 points, was established practically. For increasing the measurement accuracy it was found that quartz clocks have to be used (in place of chronometers), and that the oscillations of slow and short-period pendulums have to be recorded in order to take the Brown correction into account. The apparatus, the procedure, and the processing of the pendulum-measurement results are described in detail. [Abstracter's note: Complete translation.]



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